

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
30 June 2005 (30.06.2005)

PCT

(10) International Publication Number
WO 2005/059576 A2

(51) International Patent Classification⁷: **G01R 31/02**

(21) International Application Number:
PCT/GB2004/005340

(22) International Filing Date:
20 December 2004 (20.12.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
329381.8 19 December 2003 (19.12.2003) GB

(71) Applicant (for all designated States except US): **ADVANCED ANALYSIS AND INTEGRATION LIMITED** [GB/GB]; River Park Business Centre, River Park Road, Manchester M40 2XP (GB).

(71) Applicant and

(72) Inventor (for all designated States except US): **CORRY, John** [GB/GB]; Advanced Analysis and Integration Limited, River Park Business Centre, River Park Road, Manchester M40 2XP (GB).

(74) Agent: **McNEIGHT, David, Leslie**; Brow Top Lees Lane, Wilmslow, Cheshire SK9 2LR (GB).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: LOOP RESISTANCE TESTER

(57) Abstract: There is disclosed a method and apparatus for measuring loop resistance by injecting into the loop through an inductive injection probe a sinusoidal drive signal at a given frequency, preferably of the order of 1 kHz, to produce a predetermined current in the loop, measuring, by a test probe also inductively coupled to the loop, the true RMS drive voltage signal and induced current, and calculating the loop resistance from the measured RMS values. Also disclosed is a method of providing a reference loop of accurately known resistance, and a multi-value reference loop facilitating accurate measurement of fractional loop resistance.



WO 2005/059576 A2